

APR 01 2008Customer No.: 31561
Docket No.: 12790-US-PA
Application No.: 10/709,609**AMENDMENT**

Please amend the application as indicated hereafter.

To the Claims:

Claim 1 (currently amended) A data compression/decompression device, suitable for compressing/decompressing ~~[[a]]~~an uncompressed/compressed data transmitted between a data generation device and a data storage device, comprising: an input buffer, for buffering and storing said uncompressed/compressed data for ~~input processing~~; a data compressor/decompressor, coupled to said input buffer, for compressing/decompressing said uncompressed/compressed data and outputting a compressed/decompressed data; an output buffer, coupled to said data compressor/decompressor for buffering and storing said compressed/decompressed data for output; ~~a data compressor/decompressor, coupled to said output buffer, for compressing/decompressing said data for input and storing said data for output in said output buffer~~; and a controller, coupled to said input buffer, said output buffer and said data compressor/decompressor, for controlling data transmission with said data generation device and said data storage device, controlling compressing/decompressing said uncompressed/compressed data, and managing an address mapping table which is the cross reference between an access address transmitted from said data generation device and a physical address of ~~storing the data~~ storage in said data storage device.

Claim 2 (currently amended) The device of claim 1, wherein said controller

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includes: a data generation control unit, for controlling data transmission with said data generation device; a data storage control unit, for controlling data transmission with said data storage device; a data extractor, for obtaining said uncompressed/compressed data from said input buffer, extracting a compressing/decompressing portion of said uncompressed/compressed data, and sending said compressing/decompressing portion of said uncompressed/compressed data to said data compressor/decompressor; and a main control unit, for coordinating and controlling said data generation control unit, said data storage control unit, and said data extractor, and for managing said address mapping table.

Claim 3 (original) The device of claim 1, wherein said data generation device is at least one of a host, a laptop computer, a microprocessor, an interface card and a router.

Claim 4 (original) The device of claim 1, wherein said data storage device is at least one of a hard disk drive, a floppy disk drive, a CD-RW drive, a magnetic-optical device, a digital video recorder and a flash memory card.

Claim 5 (currently amended) A system applying a data compression/decompression device, comprising: a data storage device, having a first data transmission interface; a data generation device, ~~accessing a data in said data storage device via said data transmission interface~~ having a second data transmission interface; and a data compression/decompression device, coupled to said data storage device and said data generation device via said first and second data transmission interface interfaces.

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respectively, for compressing/decompressing said an uncompressed/compressed data transmitted between said data storage device and said data generation device and managing an address mapping table which is the cross reference between an access address transmitted from said data generation and a physical address of storing said data in said data storage device, wherein said data compression/decompression device comprises: an input buffer, for buffering and storing said uncompressed/compressed data for processing; a data compressor/decompressor, coupled to said input buffer, for compressing/decompressing said uncompressed/compressed data and outputting a compressed/decompressed data; an output buffer, coupled to said data compressor/decompressor for buffering and storing said compressed/decompressed data for output; and a controller, coupled to said input buffer, said output buffer and said data compressor/decompressor, for controlling data transmission with said data generation device and said data storage device, controlling compressing/decompressing said uncompressed/compressed data, and managing an address mapping table which is the cross reference between an access address transmitted from said data generation device and a physical address of data storage in said data storage device.

Claim 6 (canceled)

Claim 7 (currently amended) The system of claim [[6]]5, wherein said controller includes: a data generation control unit, for controlling data transmission with said data generation device; a data storage control unit, for controlling data transmission with said

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data storage device; a data extractor, for obtaining said uncompressed/compressed data from said input buffer, extracting a compressing/decompressing portion of said uncompressed/compressed data, and sending said compressing/decompressing portion of said uncompressed/compressed data to said data compressor/decompressor; and a main control unit, for coordinating and controlling said data generation control unit, said data storage control unit, and said data extractor, and for managing said address mapping table.

Claim 8 (original) The system of claim 5, wherein said data generation device is at least one of a host, a laptop computer, a microprocessor, an interface card and a router.

Claim 9 (original) The system of claim 5, wherein said data storage device is at least one of a hard disk drive, a floppy disk drive, a CD-RW drive, a magnetic-optical device, a digital video recorder and a flash memory card.

Claim 10 (currently amended) The system of claim 5, wherein said first or second data transmission interface is one of an IDE interface, a 1394 interface, a SCSI interface, a serial ATA interface, a serial attached SCSI interface, a PCMCIA interface and a USB interface.